

Alliance

EAST CAROLINA UNIVERSITY COLLEGE OF ALLIED HEALTH SCIENCES

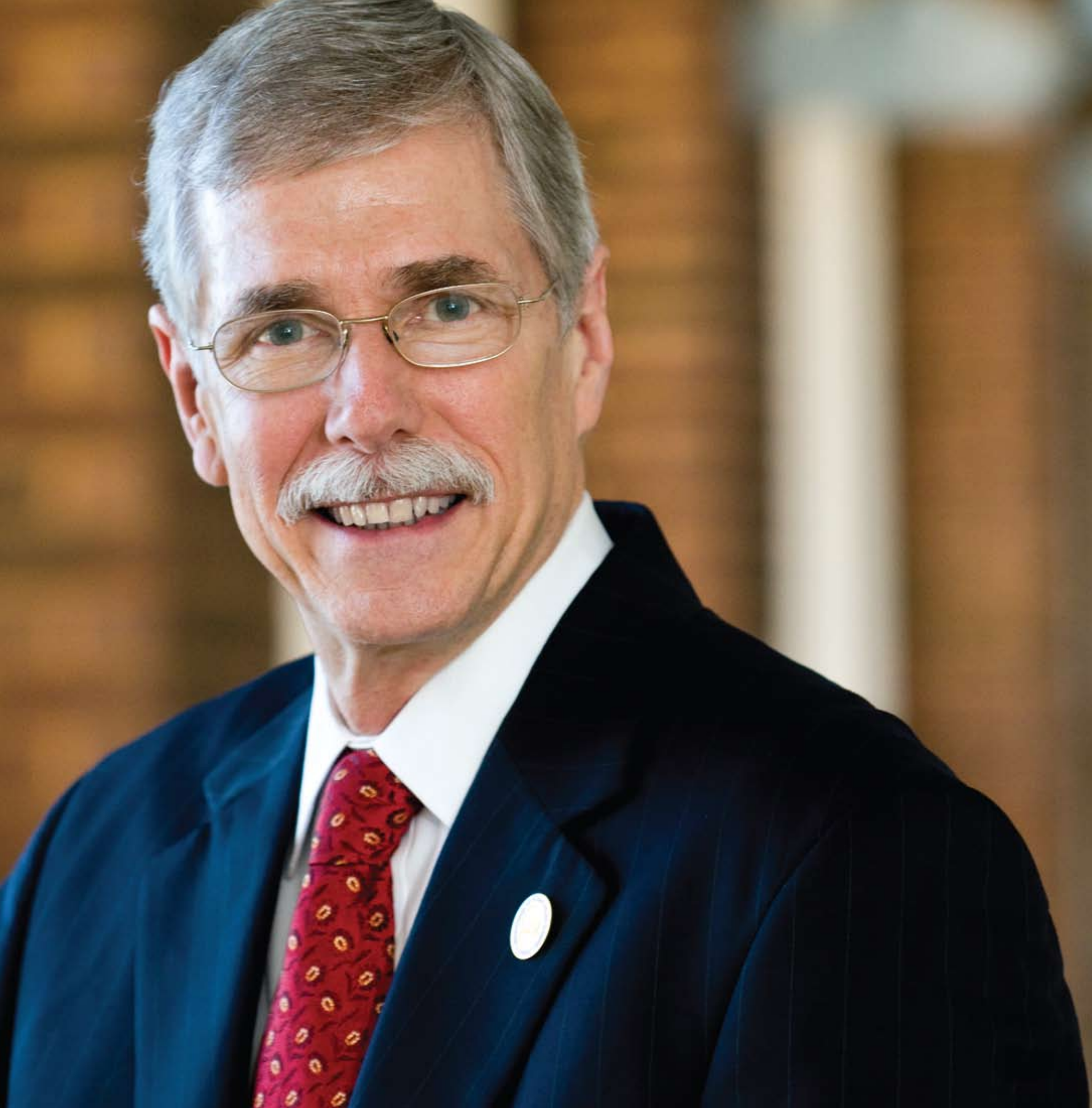
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2009

**Team ECU: Preventing
falls in older adults**

**Employing hope and
recovery from addiction**

**Restoring rhythm for
stroke survivors**



A message from the dean

I always enjoy writing the dean's message for Alliance because it gives me a chance to review our annual progress with all of you, and I am proud to say the College of Allied Health Sciences has experienced another successful year.

Fall 2008 was the 40th anniversary of the arrival of our first class of students. We celebrated this historic anniversary during homecoming with a reception and an awards luncheon attended by a record 193 participants. Many of the 40 distinguished alumni honored last year helped us recognize 40 outstanding students this year. Dr. Ed Monroe, founding dean of allied health, provided a wonderful glimpse of the early years and good advice for the honorees.

Our college has grown from 465 students in 2001 to 794 students in 2008, a 71 percent increase in enrollment. To meet that demand, in the fall 2008, 246 courses were offered by the college accounting for 492 classes a week. Thirty-five courses are Web-based distance education, and 211 are face-to-face with 3,816 students attending class weekly. These students have been succeeding: The first-time pass rates of last year's graduates were slightly higher than 96 percent, and indications are that pass rates will increase this year. In addition, we raised \$450,000 last year including the Barbara Bremer Endowed Professorship in the Department of Communication Sciences and Disorders, the first in the college, as well as an increased number of student scholarships across the college.

Research is also thriving. Last year, we experienced a 53 percent increase in grant submissions. Research and special projects emphasis areas include falls in the elderly, gait and balance, health informatics, older adult drivers, Project Working Recovery, Wounded Warrior/Project Re-entry, pediatric healthy weight, older runners and learning disabilities, to name a few. Many of these collaborative, high-impact projects have received external funding and contribute to improved clinical application. Regarding service, this year's fifth annual Jean Mills Health Symposium on minority and rural health issues was held on Feb. 6 on the topic, "Empowering Individuals to Take Responsibility for Their Own Health." Some of these projects and events are covered in this issue of Alliance.

Our new building has not only served to expand and enhance teaching, research, service and clinical practice but also has helped to recruit top faculty and students and has been the envy of allied health faculty and deans around the state and nation. This year, the college filled all of its faculty positions, something that has not happened since my employment here in 1980.

I hope you enjoy this issue of Alliance and take pride in what your participation and support have helped the College of Allied Health Sciences accomplish. Please stay in touch and visit us when you are in the area. We would love to show you what we are doing.

Stephen W. Thomas, EdD
Dean and Professor

Dean's note: Due to declining state and university budgets, this will be the last print issue of Alliance until financial conditions improve. Next year this time, the electronic version of Alliance will be posted on our Web site at www.ecu.edu/ah.



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On the cover: Colorful petri dishes await students in clinical laboratory science.

Yennyemb

takes his education a
long distance



By Doug Boyd

Emmanuel Yennyemb has taken the positive attitude that helped him earn a bachelor's degree at East Carolina University across the continent, where he's leading the installation of an electronic health record system in Alaska.

Yennyemb is the clinical application coordinator for the Indian Health Service at Maniilaq Health Center in Kotzebue, which comprises one hospital and 13 clinic sites. The 2005 graduate of the health information management program in the College of Allied Health Sciences did much of his coursework online while working full-time. He has continued his online work, earning a master's of business administration degree and working on a doctorate in information technology through Capella University in Minnesota.

Distance learning takes preparation and dedication, Yennyemb said. "You

have to do your homework first," he said. "You have to determine what works for you. It takes a lot of discipline. You have to make your plans and work on your plans daily."

His enthusiasm for his work and for the opportunities in health information management is hard to miss.

"Health care I.T. is one of the areas that still needs a lot of improvement," Yennyemb said. "When you say hospital, people think of nurses and doctors. But you have a lot more services in a hospital. You have an array of areas you can work."

With the federal government's push toward electronic health records, those areas are likely to multiply. "If each hospital becomes electronic, how are we going to be able to transmit that information? How are you going to

transmit that information from one system to another? How do they all talk together?" Yennyemb said, summing up a significant hurdle to converting venerable paper medical records to an electronic health exchange system.

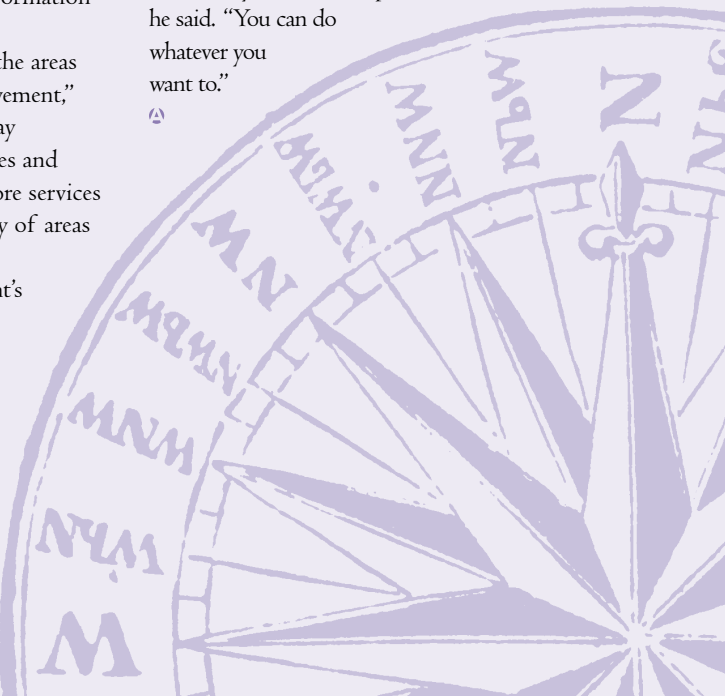
Yennyemb was born in Nigeria and grew up in Ottawa, Canada. He came to the United States with his wife, who was recruited here as a nurse. They have two daughters and one son.

Faculty members knew he would be successful once he graduated. "As a student, he had such a positive, 'can-do' attitude, which he still projects today," said Dr. Elizabeth Layman, chair of health information management at ECU. "He listened to feedback and incorporated it into his projects. In class discussion and projects, he had the unique ability to translate abstract theoretical concepts and didactic learning into concrete recommendations and practice. He was particularly sensitive to the human side of leadership and management."

Yennyemb's family still lives in Greenville, and he returns to visit monthly. His job also takes him to other parts of the country, an aspect he enjoys. He encourages students to stay focused on their goals and work hard to achieve them.

"It's amazing if you put your mind to it what you can accomplish," he said. "You can do whatever you want to."

▲



Running with purpose

By Crystal Baity

Putting one foot in front of the other carried Erin McClure and Angela Coton 26.2 miles through the streets of Chicago.

After months of training, the graduate students in physician assistant studies completed the Chicago Marathon on Oct. 12. McClure's time was 5 hours, 31 minutes and Coton's time was 5 hours, 42 minutes.

In doing so, they raised more than \$2,500 for research close to their hearts.

McClure ran in her father's memory for the American Brain Tumor Association. Gary "Rock" McClure, a 1973 ECU graduate, died of a brain tumor in May 2001. He was diagnosed with glioblastoma when she was a high school senior. She watched her healthy, vibrant father slowly lose his battle with the disease.

"I think that experience will make me a better health care provider," said McClure. "Because of that, I'll have a better understanding of what people go through during difficult times."

Coton, a Chicago native and secretary for the physician assistant studies class of 2009, raised funds for the Organization for Autism Research in honor of her best friend Gaby Mattan's son, Jacob, who was recently diagnosed.

Coton developed an interest in physician assistant studies after spending a couple of weeks with her father in intensive care. She asked a lot of questions and a nurse asked if she were in medicine. "She said, if you're not, you should be," Coton recalled. She had been accepted and planned to go to law school, but a serendipitous meeting on an airplane changed everything. She sat next to a woman interviewing for a spot in a

physician assistant studies program and Coton soon made a new career plan.

Both arrived at ECU in August 2007.

McClure had been a regular runner; Coton was not. It was the first marathon for both. To prepare, they followed a weekly training schedule that began with short runs and cross training with swimming or riding a bike. They increased their mileage by 20 percent each week, building up to a 20-mile run a couple of weeks before the marathon. At that point, they were putting in 30 miles each week.

The hardest part of training, besides making time for it with a full-time class schedule, was the lack of safe places to run. Many areas don't have sidewalks. McClure and Coton created running routes that could be repeated to extend their mileage. They considered running from Greenville to Washington on U.S. 264 but decided it would be too dangerous.

"This summer, we lucked out when we had our long runs in July, August and September. It was pretty cool each time," Coton said.

Marathon day was exceptionally hot for Chicago in early fall: 83 degrees and high humidity. Runners were advised to take care. The event could have been cancelled if conditions worsened.

They ran together the first 18 miles. There were 33,000 runners. About 31,000 completed the race out of 45,000 who initially registered. Staggered starts kept people moving and uncongested. "A couple of miles into it, we had a clear running path," McClure said.

People watching, talking — even overhearing a couple who argued for miles and eventually dropped out — helped keep



Angela Coton, left, and Erin McClure ran in the Chicago Marathon in October to raise money for research on autism and brain tumors.

them going. Cheers and homemade signs posted by spectators, water stations, and funny nicknames runners put on their shirts like "Hot Dog" and "Tall Paul" was additional motivation. "When you were laughing, you weren't thinking about running," Coton said.

They traversed 29 different neighborhoods, often hearing music from mariachi to the Village People through

open windows. Residents even pulled out water hoses to help cool down runners as they passed. "The city is so supportive," said Coton, a die-hard Chicago Cubs fan.

They celebrated their accomplishment, and Coton's 30th birthday that same weekend, by going out to dinner in high heels the night of the marathon. In the days that followed,

their muscles were so sore that they had to walk down steps sideways.

McClure said she would run a half-marathon again, but isn't sure about a full marathon. Coton, who has continued to walk and run regularly since marathon training, said she would do it again but not during graduate school. "I think we took on a big challenge on top of another challenge," Coton said. "Time

itself was the biggest challenge."

Both are in clinical rotations now.

They began the first of eight, six-week rotations on Jan. 5, and plan to graduate in December.

For more information, go to McClure's fundraising Web site at www.active.com/donate/abta2008/myrock and Coton's Web site at www.firstgiving.com/angela-coton. ☺

Team ECU: Preventing falls

Assessment assists older adults

By Crystal Baity

East Carolina University is a leader in research into falls in older adults and now operates a pilot clinic aimed at preventing people who have fallen from falling again.

People 65 and older seen in the emergency department at Pitt County Memorial Hospital for fall-related injuries are referred to the Brody School of Medicine's Geriatric Center in the Department of Family Medicine for evaluation. The clinic started in July, funded by a \$49,936 grant from the Pitt Memorial Hospital Foundation through ECU's physical therapy and occupational therapy departments. The hospital, serving 29 counties in eastern North Carolina, admitted more than 1,200 people for falls in 2006 and often treats repeat fallers.

Once enrolled, participants receive an information packet to fill out at home and send in before they come to the clinic, where they get a free, thorough evaluation by an ECU team: physical therapist Leslie Allison, occupational therapist Jane Painter, geriatrician Ken Steinweg and pharmacist Ann Nye.

"When they come, we already know a lot about them," said Steinweg, interim chair of family medicine.



The team provides comprehensive screening, identifies risk factors for falling, refers patients to resources in their community, and provides recommendations to patients and their caregivers to reduce fall-related risk factors. Participants are contacted weekly by physical therapy graduate students for three months as a follow-up to determine any concerns, questions or compliance with recommendations.

"Falls are an epidemic, and it's going to get much worse," said Allison, assistant professor of physical therapy. "The boomers are coming in the 'silver tsunami.' The health care system and public are unaware of the size and dramatic effect it will have on the health care system."

Recently, 90-year-old Miriam Lilja of Bethel completed a battery of tests in the falls clinic after being referred from the hospital. A wound on her forehead was still healing.

Armed with stopwatches and notepads, Allison and physical therapy graduate student Jennifer Brewer asked Lilja to do a variety of things – getting up from a sitting position and walking, stepping over a box, turning around in a circle, walking around a cone – to evaluate her balance and walking.

Lilja said she was shuffling and not picking her feet up well. Her left leg felt limp.

Later, Brewer used a filament to touch different parts of Lilja's feet as she kept her eyes closed. Lilja was asked to describe which part of her foot they were touching.



Graduate student Jennifer Brewer and assistant professor Leslie Allison hold Miriam Lilja's hands as she completes tasks in the ECU falls prevention clinic.

"I must be numb," said Lilja, who had trouble feeling some areas on the bottom of her feet. To compare, they tried the same exercise on her hands. She had no problem identifying which finger the filament was touching while her eyes were closed.

"When she can feel it, the response is rapid and accurate," Allison said. "With her feet, the response is slower and not as accurate."

After a brief rest, Lilja continued

the assessment by walking normally, then at a faster pace, then slower, and repeated the pattern as Brewer and Allison timed and took notes. "Go as quickly as you safely can," Allison said.

The information is used to calculate Lilja's risk for falls and make recommendations for modification. A regular exerciser, Lilja swims, does water aerobics and practices Tai Chi. "I knew it would help me on my balance," said Lilja, a New York native who

relocated many years ago with her job at Burroughs-Wellcome.

The falls clinic is being looked at as a possible prototype for the entire state, said Painter, associate professor of occupational therapy. Allison and Painter visited states with similar programs, Wisconsin and Maine, and brought back evidence-based strategies to adapt for use here.

Statistics back up the need for the clinic. Falls resulted in more than

193,000 emergency department visits – the top cause of injury-related visits – in North Carolina in 2007, according to the Injury and Violence Prevention Branch of the North Carolina Department of Health and Human Services. One-third of people 65 and older, and nearly half of people 85 and older, fall at least once a year. Half of those will fall repeatedly. And an estimated 15 percent to 20 percent of falls lead to injury, and 5 percent result



in a hip fracture. Falls are the leading cause of injury-related accidental death in older adults.

“Falls are not inevitable, and prevention is possible,” Allison said.

Falls are not a part of the normal aging process, but certain chronic health conditions, such as stroke, Parkinson’s disease or diabetic peripheral neuropathy, combined with medication side effects, can decrease balance and increase the risk for falls in older adults, Steinweg said. “With all these things going on at the same time, it makes someone more likely to fall,” he said.

If someone has a decrease in balance, unsteady gait, touches furniture or other objects in order to move around, or experiences a near fall, he or she should be evaluated by a health care provider, Allison said.

“If you do nothing, it gets worse, and you will fall again,” Allison said.

If someone with two or more falls within six months is left unchecked, the odds are almost certain they will

fall again. Fear of falling, which Painter has studied with support from the community partnership Pitt Partners for Health, is a separate but related problem that can lead to isolation, depression and anxiety, decreased flexibility and increased risk of falls by adopting a sedentary lifestyle. “This is exactly the wrong approach,” Allison said.


A significant reduction in falls and fall risk can occur with proper diagnosis and education. It requires behavior change, adoption and adherence to exercise and physical activity, home modifications and good judgment, said Allison, who with Painter is co-chair of the Eastern North Carolina Fall Prevention Task Force, with representatives from 20 agencies working to increase awareness and education about falls, provide service and engage in community research and collaboration.

The task force has been supported by \$46,250 in grants from the Carolina Geriatric Education Center and the Eastern Area Health Education

Center. The task force developed a primary care physician survey and a program on screening older adults for fall risk which Allison and Painter presented to more than 100 health care professionals at six hospitals in eastern North Carolina. Data from the surveys is being analyzed.

In addition, Painter is a Matter of Balance master trainer, a community-based fear of falling education program, and the task force has sponsored a Matter of Balance workshop in which 22 health professionals from all areas of North Carolina were trained as master trainers. “It is our goal that these new master trainers will begin to teach this course to seniors throughout the state,” Painter said.

As baby boomers age, education and awareness about fall prevention becomes more critical.

“In 2011, every 11 seconds someone will turn 65. If that doesn’t speak to the tsunami that’s coming, I don’t know what does,” Painter said. 



I am an ECU allied health sciences student

Applied for undergraduate admission: 263

Admitted to undergraduate programs: 163

Average GPA admitted into undergraduate programs: 3.1

Applied for graduate admission: 1,052

Admitted for graduate programs: 159

Average GPA admitted into graduate programs: 3.4

Total number of students enrolled in allied health sciences degree programs in fall 2008: 794

Female students: 654

Male students: 140

White students: 83 percent

Non-white students: 17 percent

Full-time students: 84 percent

Part-time students: 16 percent

In-state students: 89 percent

Out-of-state students: 11 percent

Other important statistics:

Approximately 60 percent of students are enrolled in master’s or doctoral programs; more than 88 percent of past graduates stayed in North Carolina for employment

Welcome To Liberty Church

Lessons in Faith

People with diabetes who use spirituality
to cope have better health

HOLY
BIBLE



By Crystal Baity

As someone who has lived with diabetes most of her life, faith has been Dr. Susie Harris' foundation.

Diabetes and faith became research for her doctoral dissertation in rehabilitation studies, which she successfully defended in June. Harris studied whether people with diabetes in eastern North Carolina who use spirituality as a coping mechanism have better health outcomes.

They do, based on her research, which is being prepared for publication.

Diabetes is a chronic disease in which the body does not produce or properly use insulin, a hormone needed to convert sugar, starches and other food to energy, according to the American Diabetes Association. Controlling diabetes requires rigorous daily management and medication, diet and exercise to keep blood sugar levels in check. The disease can lead to serious complications like blindness, kidney damage, amputation and cardiovascular disease, even premature death, but prevention is possible with proper self-care.

"There are several studies that show spirituality does have a positive impact on health conditions in general. I wanted to look at it specifically to diabetes and eastern North Carolina,"

said Harris, an assistant professor in the Department of Health Services and Information Management with 18 years' experience in health care administration.

She mailed a 43-question survey to 2,615 people with diabetes in eastern North Carolina. Individuals with a fasting blood glucose level of 126 or more were classified as diabetic. Harris looked at the A1c levels, a measurement of glucose in hemoglobin in a three-to-four month timeframe, over a 10-year period. The test monitors whether treatment is working or if it needs to change. People with diabetes who had at least three A1c levels documented over a 12-month period were used in the study. Average A1c levels along with slopes of the data were analyzed. The study is a significant addition to the literature because it used a biological measure, the mean A1c level, as a criterion for health status. Most studies that use A1c levels tend to rely on a single A1c measurement at one point in time, Harris said.

For the study, spirituality was defined as believing in God or a higher being. Thirty-nine percent of the respondents said they used spirituality as a coping mechanism for their diabetes more than 90 percent of the time. Twenty-eight percent used it 50 percent to 80 percent of the time, and 28 percent used it less than 40 percent of the time. Five percent didn't answer.

Harris' research showed that support systems also were important. A total of 28 percent said their support system included family, church and a health care program, while 23 percent used only family support, and 22 percent had family and church support. Another 16 percent said they used a combination of family and a health care program, while 11 percent relied on some other combination.

"I do not remember not being a diabetic," said Harris, who has had Type 1 or insulin-dependent diabetes since she was 9.

For 17 years, she has been on an insulin pump, which provides tight control over blood sugar with fewer fluctuations. Before, she took two to three insulin shots daily to manage her diabetes.

"I'm so thankful my diabetes is like it is, and I know my faith plays a part," Harris said. "It makes me an optimistic person — always with hope. I think of my diabetes as a challenge not as an obstacle."

If not for faith, Harris said she probably wouldn't have survived a severe brain injury at age 11 when a van hit her while riding her bike. She was thrown 20 feet in the air and landed on the pavement. She lay in a coma with intermittent seizures for seven days at Pitt County Memorial Hospital, where a neurosurgeon told her parents if she survived, she would likely be in a permanent vegetative state. Their

church, Grace Baptist in Kinston, and more than 50 churches around the state "stopped their services and prayed for me," Harris said.

Defying prognosis, she learned to walk and talk again during a lengthy rehabilitation. One year after the accident, her physician called her a miracle. Fully recovered, she eventually earned an academic college scholarship and, years later, became the office manager for the neurosurgical practice of the doctor who treated her as a child.

"Prayer changes things," she said.

Dr. Daniel Wong, professor and director of doctoral studies in the Department of Rehabilitation Studies, initially doubted Harris' ability to complete the program because of the time requirements needed for a full-time faculty member who also holds a master's degree in a different field.

"She not only completed her study on schedule, but was also the first graduate from our doctoral program," said Wong, adding the research has "tremendous potential to contribute greatly to the body of knowledge in the study of spirituality, health care and health conditions."

Harris hopes her research will help educate other people with diabetes on the role of proper care. "If you're able to take control of it, you will save yourself numerous complications." 🙏

*Proverbs 3:6
In all thy ways
acknowledge him,
and he shall direct
thy paths.*

Dr. Susie Harris reads the Bible daily, teaches Sunday school, sings in the choir, and is one of the founding members of Liberty Free Will Baptist Church in Greenville.



Employing hope

Clients work their way to recovery from addiction

By Crystal Baity

Choosing, getting and keeping a job as a means to sustain recovery from addiction is the mainstay of a new East Carolina University service and research project called Project Working Recovery.

The innovative program assists recovering substance abusers with resume preparation, job searches, mock interviews and other work-related skills, a complement to standard substance abuse treatment. It is run by graduate and doctoral students and Dr. Paul Toriello, associate professor in the Department of Rehabilitation Studies, and funded by the Kate B. Reynolds Charitable Trust. Progress is tracked with a database custom designed by Dr. Xiaoming Zeng, assistant professor, and maintained by graduate students in the Department of Health Services and Information Management.

“Employment is the cornerstone of recovery,” said Tracie Campbell, PWR coordinator. “We try to motivate them and keep that in their mindset.”

Research shows that people who hold a job are better equipped to stop their abuse and maintain sobriety. There are several reasons behind it. Employment often takes up one-third of a person’s day. The dignity, respect and paycheck that come with a job provide for basic needs and desires in life, from food to a car, and sets an expectation for someone to be responsible, be on time and work with others.

“We’re using evidence-based interventions, and combining them with contemporary job readiness and counseling,” Toriello said.

While initial referrals came from

PORT Human Services, a private, non-profit substance abuse and mental health organization, the project has expanded to about a dozen local agencies including the Walter B. Jones Alcohol and Drug Abuse Treatment Center, half-way houses, homeless shelters and word-of-mouth.

Many have suffered chronic abuse with a history of multiple treatment attempts. Often individuals with substance abuse issues have another diagnosis such as anxiety, depression, bipolar or post-traumatic stress disorder.

“Most have gaps in their employment history,” Toriello said.

A potential barrier to successful employment is a criminal record, which follows a person wherever they go. “We do a lot of counseling and role playing,” said Leigh Atherton, PWR coordinator.

Counselors coach clients to show how they’ve changed to prospective employers. “It gets them thinking of their history in a new way. It’s less of a barrier and more of a stepping stone,” he said. “We try to better direct and not set them up for failure.”

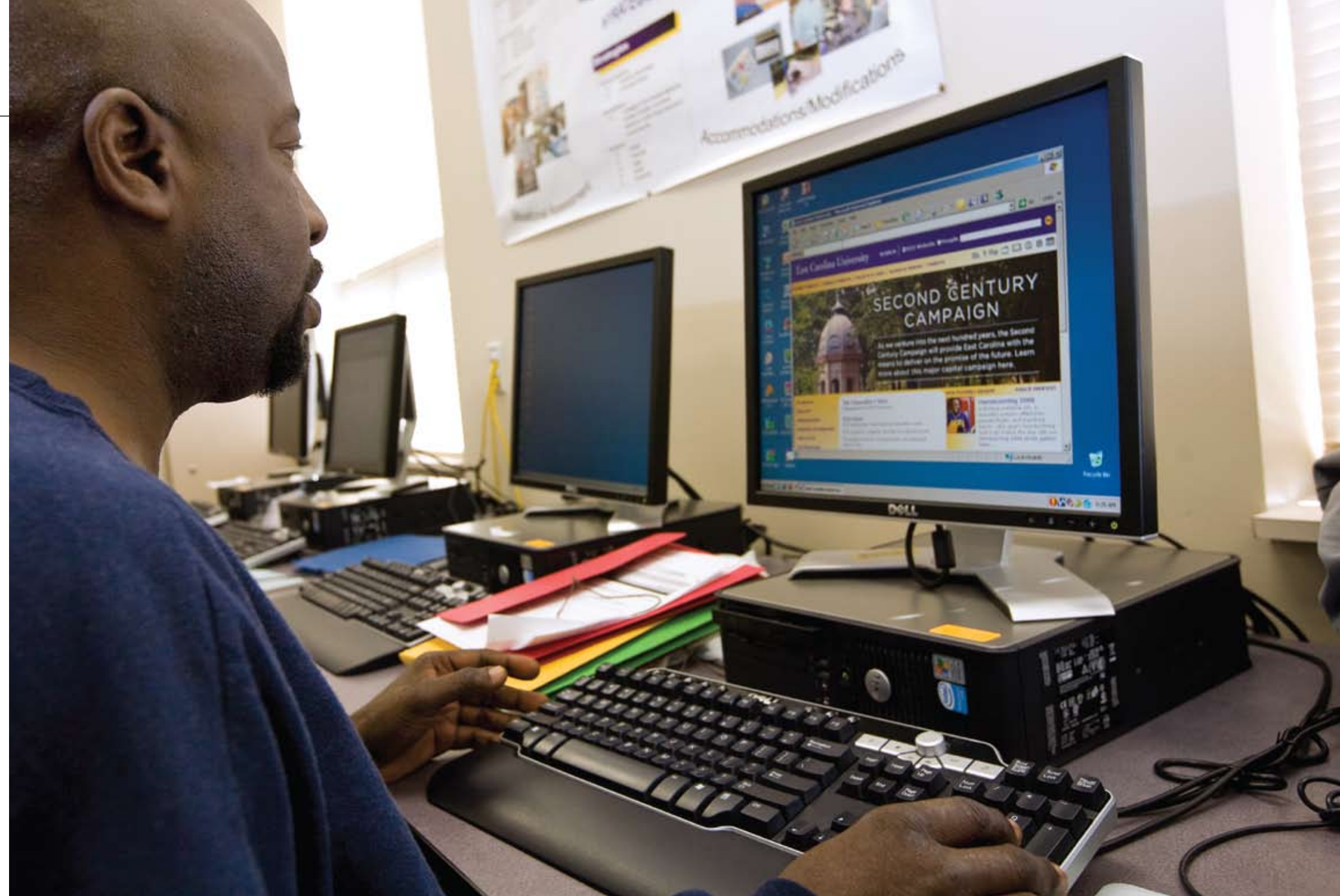
Norris Eason, a 47-year-old community college graduate, has participated in the program since August. “It’s been real helpful. There are a lot of resources.”

Eason had been a live-in personal care aide for seven years until his employer’s death last year. “When she passed, I lost my job and home, everything at one time,” he said. He lived with friends for a while before moving in a homeless shelter.

Practicing interview skills while being videotaped has made a difference for Eason. “You are prepared before you

walk in, so you’ll know the possible questions rather than getting stumped,” he said. He hopes to stay in the same line of work as a personal aide or home health assistant. “It’s always easier to get a job if you’ve got a job. But you’ve got to start somewhere and they’re helping with that.”

Graduate student Rebecca Carbaugh of Winchester, Va., worked with clients in the Project Working Recovery service center from May until December



Clients prepare resumes, search for jobs, participate in mock interviews and fine tune work-related computer skills through ECU's innovative program.

and recently began an internship in Charlotte. “It’s been a great experience,” Carbaugh said. “I don’t think I would have gotten as much counseling experience without being here.”

Tuesday through Friday, counselors see an average of seven clients each day who are unemployed or under employed and in a treatment program. An estimated 50 percent are homeless and most do not have health insurance, instead relying on public clinics for medical care. About

half are Caucasian, and there are twice as many males as females.

A promising component of Project Working Recovery is the database Zeng created. An assessment instrument takes baseline data and formulates a composite score of a client’s severity issues while constantly updating scores using follow-up information from each visit.

“The beauty of this is its functionality. It provides real-time analysis of the data every day and shows

trends,” Toriello said. “It gives us the ability to look at the no-show rate daily, weekly and monthly. You can cross-reference. For substance abuse treatment, it’s light years ahead.”

Zeng has used the project as case studies for his students in database design. “It’s a real-world project,” he said.

On a qualitative level, Toriello is seeing the outcomes he expected. The sample size has been too small for a quantitative study. In the coming

months, Toriello said, they will be able to answer quantitatively if Project Working Recovery is successful.

Anecdotally, there's been progress since the program began in October 2007. One woman who had been living in a halfway house eventually got a job as a homeless shelter supervisor. "She loves it, and she refers back to us," Toriello said.

Finding a job in a recession may seem a tall order.

"We're seeing a lot of people getting seasonal work, short-term jobs, but they're still coming in because of the realization that the job is short-lived,"

Campbell said. "I personally think that is a big step. To see the growth, looking beyond the short-term, and trying to look ahead. To see them take that step, it's very encouraging."

In the future, Toriello and Zeng will continue to develop the database, seek additional grant funding and move toward state licensure to enable the clinic to bill Medicaid for services and sustain the program for years to come.

There are only a few other places in the nation with similar programs. "We're modifying the interventions, and continue to, based on how our clients perform," Toriello said. 📍



“ Employment is the cornerstone of recovery,” said Tracie Campbell, PWR coordinator. “We try to motivate them and keep that in their mindset.”



Rehabilitation studies graduate student Dave Bautista helps a client in the lab.

Restoring rhythm

Research shows Interactive Metronome helps stroke survivors regain function

By Doug Boyd

Kim Baucom looks plenty fit as well as stylish in her jeans, sandals and painted toenails. She appears to walk and talk with ease.

But appearances don't always tell the whole story. Baucom is recovering from



a stroke she experienced in 2008. That's what has brought her to East Carolina University, where she's working with occupational therapists in the College of Allied Health Sciences on timing and rhythm with a neuro-motor assessment tool called the Interactive Metronome.

The device was developed in the early 1990s as an aid to improving the neurological processes of motor planning and sequencing. According to the company Web site, therapists use it to help children with learning and developmental disorders as well as adult neurological rehabilitation patients. It became available to the public around 2000.

Motor planning and sequencing, such as coordinating movements for walking or putting the words of a sentence in order, are central to human activity. The metronome works by using neuro-sensory

and neuro-motor exercises developed to improve the brain's inherent ability to repair or remodel itself through a process called neuroplasticity.

"As the name implies, metronome, it is about timing, about sound," said Dr. Leonard Trujillo, chair of occupational therapy at ECU. "Just like when you're a pianist, a musician, they want you to get your timing down, they put a metronome there. The concept of being in time with others has been around for centuries, really. These help integrate the individual's ability to move in a rhythmical, smooth pattern."

The human brain's efficiency and performance depend on the seamless transition of neuronetwork signals from one area of the brain to another. One study suggests the metronome works by augmenting the brain's internal processing speed. The key regions of the brain that are affected appear to be the cerebellum, prefrontal cortex, cingulate gyrus and basal ganglia, according to the company Web site (<http://www.interactivemetronome.com>). These parts of the brain are responsible for timing as well as other daily functions such as sustained attention, language formulation, motor coordination and balance.

The metronome program challenges the patient to synchronize a range of hand and foot exercises to a precise computer-generated tone heard through headphones. The patient attempts to match the rhythmic beat with repetitive motor actions: clapping, tapping the

hand to the thigh, tapping the foot. A patented auditory-visual guidance system provides immediate feedback measured in milliseconds. Green signals mean the participant was within 15 milliseconds of the tone. Yellow signals mean the participant was within a 100 milliseconds before or after the tone.



A stroke survivor, Kim Baucom puts her tennis skills to work mastering the Interactive Metronome.

Red means the participant was more than 100 milliseconds off. The colors appear to the left or right of the center marker to indicate whether the user was early or late.

Over the course of the treatment, patients learn to focus and pay attention longer, increase physical endurance and

stamina, filter out distractions, improve their ability to monitor mental and physical actions as they are occurring and progressively improve coordinated performance. Targeted patient populations include attention-deficit hyperactivity disorder, traumatic brain injury, stroke, multiple sclerosis and others.

"It does challenge the full body," Trujillo said. "It does challenge two-hands and two-sided movement."

With a \$20,000 grant from Interactive Metronome, Trujillo is leading a study of post-stroke patients to see if the device can help them gain more fluid movement and better coordination.



Dr. Leonard Trujillo

“The person who’s had a stroke has lost the movement,” Trujillo said. “If we can use this to encourage development and get a return of that movement, that’s invaluable for the client.” He’s seen some patients who did regain movement in their limbs and hands and improve their function.

“These are people who had a stroke three years ago and were told by physicians they would not get anything back, so we’re seeing these kinds of positive changes. It doesn’t matter what the physician says. We are making changes,” Trujillo said.

Other faculty members are also using the metronome in research. Dr. Jane Painter, an associate professor of occupational therapy, is supervising graduate students who have recently completed a study to determine if the metronome is an effective method of improving balance among older adults. They worked with two married couples, and one of the men had Parkinson’s disease. They are in the early stages of data analysis.

At the other end of the age scale, Dr. Carol Lust, an assistant professor, is

using the metronome as part of a writing study with children in the federal Head Start program.

In the past, ECU researchers have used the device to improve coordination among older drivers. ECU studies have shown an average 25 percent improvement in participants’ base scores in the metronome’s timing and coordination exercises.

In Trujillo’s study, participants work with the metronome twice a week for 45 minutes each time. The study began last July and goes through this July. Study subjects take part for eight weeks.

Baucom, 45, is a former amateur tennis player who reached the nationals with her Ohio league in 1997 before she moved to North Carolina. Last year, while preparing dinner at her Farmville home, she felt dizzy, then noticed an odd feeling in her left arm and then had trouble eating. She couldn’t keep her food in her mouth.

“I looked at my husband and said, ‘I think I had a stroke,’” she said. Even so, she cleaned her kitchen a little before the couple drove to Pitt County Memorial Hospital. Doctors determined she did have a severe stroke and kept her in the hospital for five days but couldn’t determine whether she had an ischemic or hemorrhagic stroke.

Now, she can walk well and drives

herself, but lacks fine motor skills, especially with her left arm and hand. “I thought I would see more progress, because it’s been nine months,” she said of her rehabilitation.

As an accomplished athlete, her hand-eye coordination excelled before the stroke. It still shines with the Interactive Metronome. In one exercise, she hit the target 17 consecutive times. After four weeks in the study, she said her bilateral movement is better. She can now fold towels, which she couldn’t do before.

Baucom also has some musical training, which helps her have good timing, according to occupational therapist and clinical researcher Annette Jones.

“If they’ve been trained in music, they start off at a higher level,” said Jones, who’s working with Baucom and other study participants. “It’s the rhythm, the beat and the timing.”

Another patient, John DeCook, had a stroke three years ago. Today, he has speech difficulty and disability on his right side. But he drives each week from his home in Jacksonville to work with the metronome. Working and concentrating hard, DeCook, 54, breaks into a sweat during the exercises. He has seen some improvement, saying he can more easily put on his shirts, walk and climb stairs. His right arm is also more relaxed.

After each exercise, he sighs, sounding disappointed because his competitive nature makes him want to master the metronome. But he also has an easy laugh with the therapists as they get ready for the next round.

Trujillo said that’s a common reaction from patients who know they’re getting better.

“They’re like little kids,” he said. “They get a big smile on their face.” 🎧

Alison Grieshop, an ECU occupational therapy graduate student, helps John DeCook of Jacksonville get ready for an exercise using the Interactive Metronome.



Beth Velde

‘walks the walk’ as director of ECU’s new Outreach Scholars Academy

By Christine Neff

Dr. Beth Velde knows the importance of community engagement in scholarly work.

For 11 years, she has partnered with the small, North Carolina community of Tillery on research, health services, grants and publications. The benefits, she said, have flowed both ways.

“Tillery has been my teacher,” said Velde, professor of occupational therapy and assistant dean in the College of Allied Health Sciences. “I always said they have given me far more than I have ever done for their community.”

Now, Velde will be encouraging other ECU faculty members to pursue scholarship related to community outreach, partnership and curricular engagement as the director of ECU’s new Engagement and Outreach Scholars Academy.

Housed within the Office of Engagement, Innovation and Economic Development, the academy’s purpose is to cultivate engaged scholars who can be leaders in their professions while working with communities to improve quality of life and foster economic prosperity.

Dr. Ted Morris, associate vice chancellor for Engagement, Innovation and Economic Development, said the academy developed out of recognition that “more could be done to support and enhance faculty knowledge and capacity to secure external funding and conduct scholarly work throughout the region.”

“The academy is an important part of

ECU’s response to the UNC Tomorrow Commission and the university’s application to the Carnegie Foundation for the Foundation’s Engaged University classification,” he said.

Ten faculty members embarked on the program this spring including Dr. Jane Painter, associate professor of occupational therapy in the College of Allied Health Sciences. Representing a range of disciplines, these tenured, tenure-track and fixed-term faculty members were nominated by their deans and chosen by a selection committee.

They will attend six three-hour workshops to learn about community-based research and resources available to them on campus, and work with a coach to develop their research plans. In the fall, scholars who complete the program will be given a seed grant to help launch their studies.

ECU, its students and community partners will benefit from the program. The academy will raise ECU’s profile as an engaged, doctoral institution and leverage external grants for faculty research, Velde said.

“The scholarship of engagement and work with community has become a high profile issue for universities across the nation, and, I think because of ECU’s motto, ‘To Serve,’ this fits really well with what we’ve done in the past,” Velde said.

Students will benefit from the service-

learning opportunities that develop in these projects, and community agencies will gain by partnering with scholars on high-quality research initiatives, she said.

“These projects will start to address some really difficult needs in our communities, for example, the health disparities issue, the difficulties that K-12 schools are experiencing and some of the environmental issues that are prevalent in this region,” Velde said.

Research can involve global initiatives, though studies focused on eastern North Carolina will be encouraged.

Dr. Deirdre Mageean, vice chancellor for research and graduate studies, said that, through the academy, ECU will “enhance the already strong link this university has with the communities of eastern North Carolina.”

Velde is excited to head the academy, especially since much of her academic career has engaged the greater community. In addition to her work in Tillery, she has done quality-of-life research with the Caswell Center and the Parent Support Group for Children with Asperger’s Syndrome, and has organized service-learning projects throughout the region.

“This is an evolution in my role at ECU, and it represents something that has been meaningful to me, both personally and professionally. I’m very excited about it. The academy verifies our commitment to our communities and to our recently awarded Carnegie Foundation Community Engagement Classification,” Velde said.

Mageean described the choice of Velde to lead the program as a “no-brainer.” “I think it is always best when you can have somebody lead by example,” Mageean said. “Beth can walk the walk as well as talk the talk.”

Dr. Beth Velde is encouraging faculty members to pursue scholarship related to community outreach, partnership and curricular engagement.



The science of reading

Dr. Marianna Walker named distinguished professor in communication sciences and disorders



By Crystal Baity

Early in her teaching career, Dr. Marianna Walker developed a course in language and learning disabilities.

Soon she was forging a new frontier with research into the science behind learning to read and write.

Walker, a speech language pathologist and associate professor in the East Carolina University Department of Communication Sciences and Disorders, is studying the underlying causes of reading disorders and the ways that normal readers and dyslexic readers can learn to read better as a result of specific visual, auditory and language exercises.

Over the past decade, the scope of practice of speech language pathology began to include clinical work with children with literacy disorders. The connection between oral and written language was recognized, and speech language pathologists began to address

the relationship between underlying phonological processing disorders and dyslexia, Walker said.

In addition, the connections between oral language disorders and learning disabilities became a focus of researchers and clinicians in both diagnosis and intervention, she said.

Now Walker is sharing more than 20 years experience as an educator, clinician and researcher with other disciplines at ECU since being named the College of Allied Health Sciences' first endowed professor in August.

As the Barbara W. Bremer Distinguished Professor in Language Learning and Literacy Disorders, Walker is promoting teaching and learning between communication sciences and disorders, the Thomas Harriot College of Arts and Sciences, the College of Education and the Brody School of Medicine.

"We're trying to establish a consortium with education, English, medicine and child development," Walker said. "We want to provide an interdisciplinary venue for learning how to work with children having language learning disorders. We would like to offer classroom and practicum experiences for a group of students, from various disciplines, who will seek professions in working with children having language and learning disorders. We want these students to all learn together and from each other."

As part of the fellowship child adolescent psychiatry fellow will shadow Walker this semester.

"I want to develop that interdisciplinary piece to teach education students about the science of reading and language, how it translates to the classroom, and how speech language pathologists can work with educators to enhance the development of reading and oral language abilities," Walker said.

Two of Walker's communication sciences and disorders students are Donna Lawrence Wolfe and Brittney Gee.

"You have the language side, the neuroscience to reading, not just 'there's a problem' but why?" said Gee, a graduate assistant and clinical researcher. "It's a whole new world."

First-year graduate students gain evidence-based practice and focus on language systems. "With oral language, reading and written language, if one is deficient, it will affect the other," Wolfe

said. "All those systems are involved with reading comprehension."

Gee had no interest in pursuing language disabilities until she began working with Walker, her thesis adviser. Now she's aiming for a doctoral degree. "Her passion makes you want to learn as much as you can," Gee said.

Wolfe is a licensed speech language pathologist and third year doctoral student. She is researching the comprehension abilities of average readers and those with reading disorders by measuring how fast someone can read or react to a word.

"If you increase reading rate, you increase comprehension, but at what point does it decrease?" said Wolfe, who previously worked in the public schools.

Walker inspires her students.

"She is a great mentor," Wolfe said. "She has such a passion for this field. It makes a huge difference when you're a student."

Another objective of the fellowship is service. Walker, in addition to a nationally-known researcher in language and literacy disorders, will deliver the annual Bremer lecture. She also will design clinical studies, seek grant funding and coordinate the collection of research data in the North Carolina Scottish Rite Childhood Language Disorders and Dyslexia Program in the ECU Speech Language and Hearing Clinic.

Walker has been evaluating children and teens in the clinic for many years, and seizes the opportunity to entice her students to get involved in evaluation and research in this area.

The clinic is where Walker first saw the connection between learning language and literacy disorders.

"When you think about a child with a problem, you have to think about the total child, and you have to think about all the disciplines involved to help the child achieve," Walker said. "We can't work in little silos."

And collaboration among disciplines



Dr. Marianna Walker studies the underlying causes of reading disorders. Top left, Ten-year-old Jordan Dail of Winterville works in the ECU Speech Language and Hearing Clinic. Bottom left, Donna Lawrence Wolfe, left, and Brittney Gee, right, compile data in the lab with Walker.

is the goal of the Bremer professorship.

Walker first met Bremer when both were in graduate school at ECU. Walker received her bachelor's and master's degrees in speech language and auditory pathology from ECU. She earned her doctoral degree in literacy and language from North Carolina State University. She serves as chair of the North Carolina Board of Examiners for Speech & Language Pathologists and Audiologists

and is a fellow of the American Speech Hearing and Language Association.

Barbara Bremer and her husband, Dr. Chris Bremer, professor emeritus of family medicine in the Brody School of Medicine, have a long history of supporting students. In addition to the professorship, a scholarship in Bremer's name is awarded annually to communication sciences and disorders graduate students. 📌



Student Profile

or phlebotomist, I didn't see the nurses at their stressful moments," said Hoskins in describing the physical and emotional strain. "Nursing has made me a better leader. I don't regret going into nursing at all."

As a non-traditional student, her re-entry into academic life has gone well. "It's been at least five years since I had a microbiology class," said Hoskins, 31, who completed pre-med coursework at Clemson University before transferring to Greenville Tech for nursing.

"Novice is a good student and has a strong background in the health sciences," said Dr. Richard Bamberg, professor and chair of clinical laboratory science. "She is very disciplined and has a high level of integrity and professionalism."

Hoskins received the 2008 scholarship from the North Carolina Society for Clinical Laboratory Science, a chapter of the American Society for Clinical Laboratory Science, the only one awarded in the state last year.

Evaluating a blood cell count for infection or identifying a microorganism is some of the behind-the-scenes work that a medical technologist does. "People don't know how that works. When I tell people I'm going into clinical lab science, they say, you already know how to do it (because she's a nurse). It's frustrating. The profession I'm going into now, you actually perform the test, not just collect the specimen. I'm performing the tests that I use as a nurse to take care of my patients."

After graduation, Hoskins hopes to be a generalist or work in a clinical chemistry department.

"I hope I will enjoy working in a lab and I still want to go to medical school one day. I'm leaning toward pathology," said Hoskins, who is on track to graduate in 2010. 🐾

Novice Hoskins is a nurse and a junior in the Department of Clinical Laboratory Science.

Novice Hoskins

From bedside to the bench

By Crystal Baity

Sitting down with the Sunday newspaper is one of Novice Hoskins' favorite things, along with reading nursing blogs and watching cable or network news.

"I'm addicted to it. I try to keep up with current events," she said.

Not that she ever lingers long. A registered nurse, she works part time and attends class full time as a junior in the Department of Clinical Laboratory Science.

Hoskins began as a nursing assistant, became a certified medical assistant and phlebotomist and put herself through nursing school at Greenville Technical College in Greenville, S.C. She has worked in the med/surgical unit and operating room at Duke University Medical Center

and UNC Hospitals and in private practice dialysis. Most recently she's been on night shift caring for patients at Tar River Manor in Greenville.

"The main thing is the acuity. People are a lot sicker now and people are living longer now," said Hoskins, a Macon, Ga., native.

Her patients range from middle-aged to more than 90 and her caseload is typically 20 to 25 patients.

"I like my patients. I try to have a connection with my patients. I like to be able to solve problems," Hoskins said. "I've been told I'm a good nurse."

Working as a phlebotomist led to her interest in clinical lab science.

"I went into nursing not knowing the stress level. When I was a lab assistant

A Magical Forest



Dougherty explores the Costa Rican countryside. Bottom right, she is with Cloud Forest School students.

By Crystal Baity

Rain boots are the standard footwear for Michelle Dougherty's 40-minute walk to work each day.

On an unpaved road, in the middle of Costa Rica's mountainous rain forest, she wouldn't think of wearing anything else.

Dougherty, who graduated in 2008 with a bachelor's degree in rehabilitation studies and a minor in child development and family relations, is a special education teacher at The Cloud Forest School. She moved to Monteverde, an ecotourism and birding mecca, in August.

"My degree prepared me so much and in so many different ways," Dougherty, 23, said.

She works with children with disabilities. Among them is an older

student she is helping teach to live on his own, balance a budget and find a job.

Nature conservation is an important mission of the bilingual, K-12 school. The students regularly see sloths, monkeys, toucans and coatis, a mix between raccoons and monkeys. They study de-forestation, pollution and global warming. "The curriculum is intertwined with the forest," she said. "The whole concept of the school drew me to it."

Dougherty eventually wants to return to graduate school to study occupational therapy. She realized she wanted to work in the health field at age 15, when her mother was diagnosed with cancer and she helped care for her. At ECU, she volunteered at Operation Sunshine and completed an internship with Therapeutic



Innovations in Greenville where she worked with an occupational therapist who provided treatment to children.

Right now, she's happy living in a log cabin surrounded by wildlife and working in a unique environment. "I can't tell you how many times I've been woken up by monkeys jumping on the roof," Dougherty said. She sees an average of six large rainbows each day.

"It's absolutely beautiful," she said. "It's been such an eye-opening experience. The greatest lesson I've learned is just how diverse the world is."

No car, no cell phone, no TV.

"You realize you don't need those things to be happy," Dougherty said. "We have everything in excess in the United States. I'll never be the same person when I move back. I'll have a whole new approach to life."

Her social time involves hiking, salsa dancing on Thursday nights and meeting new people. She's also learning Spanish. Martha Chapin, associate professor and director of the undergraduate rehabilitation services program, said Dougherty was a dedicated student with a passion for working with children.

"She is creative, a good listener, who communicates effectively and is a team player," Chapin said.

Because the area lacks services like occupational therapy, Dougherty has been learning to provide them in an unofficial capacity from two mentors at her school, which has 230 students.

"They don't have those resources," Dougherty said. "We have to give those students those services. You realize you can make a difference." 🐾



Scholarships

Sarah Parker Womack was one of five recipients of the Robert H. Wright Alumni Leadership Award. Womack of Washington received a bachelor's degree in health services management last May. The \$250 award recognizes academic achievement, service to the university and community and leadership qualities.

Kristal N. Mills, an audiology doctoral student from Trenton, received the Berbecker Foundation Fellowship valued at \$3,000. The scholarship honors exceptional accomplishment, commitment and skill toward a career in allied health sciences. Mills also received a \$500 graduate student travel award from the Association for Research in Otolaryngology.

LaTonya R. Taylor, a junior from Kinston in the Department of Communication Sciences and Disorders, received the ECU Medical & Health Sciences Foundation Scholarship. The \$1,500 scholarship honors recipients with at least a 3.0 grade point average who contribute significantly to the community with preference given to those who intend

to work in eastern North Carolina.

Rhonda Lofton, a health information management student, was the 2008 winner of the Peggy H. Wood Scholarship. Wood began ECU's program and chaired it for 26 years.

Amber Crystal Smith of Mount Airy received the first W. James & Susan T. Smith Student Scholarship. The scholarship is for the senior academic year. The award recognizes more than 30 years of academic contribution to ECU by Dr. Susan T. Smith, retired department chair and professor emeritus in clinical laboratory science, and her husband, Dr. W. James Smith, who was a biology faculty member.

Traci Campbell, rehabilitation studies, received the 2008 Beth Lambeth Memorial Scholarship in the spring and **Jennifer Long** received the scholarship in the fall. Each received \$1,000. Students must show exemplary leadership, scholarship and character.

Jeffrey Bonito, physician assistant studies, received the 2008 Bunting Scholarship. The \$1,000 scholarship is funded by Michael L. Bunting. Criteria



are financial need and scholarship.

Physician assistant studies student **David Propst** received the American Academy of Physician Assistants Veteran's Caucus scholarship of \$1,250. Eligibility is based upon the student's scholarship, service, need and recommendation of department chair Larry Dennis.

Erin L. McClure, a physician assistant studies student from Asheville received the Health Sciences Golf

Classic Scholarship. The \$3,000 scholarship honors recipients with at least a 3.5 grade point average, achievement in clinical study and community service.

The following students were honored in the Department of Physical Therapy:

Danielle Bogner received the Catherine Virginia McCulley Memorial Scholarship. The \$1,500 award is given annually for outstanding academic achievement, caring attitude and professional commitment.

Kate Korosa DeJesus and **Kali Phillips** received the George Hamilton Scholarship. Hamilton began the physical therapy department and chaired it 19 years. Each scholarship is \$500 and assists third-year students enrolled full-time with grade point averages of 3.5 or more.

Amanda Mahaffee of Raleigh received the Lyllian Pearl Eason Award. The \$1,000 scholarship is awarded to a second-year student interested in geriatric physical therapy. Mahaffee also received the Gravely Foundation Scholarship valued at \$500. Academic excellence, financial need, good



Dr. Stephen Thomas, left, dean of the College of Allied Health Sciences, and Dr. Gregg Givens, right, chairman of the Department of Communication Sciences and Disorders, congratulate junior LaTonya R. Taylor who received the ECU Medical & Health Sciences Foundation Scholarship.

citizenship and dedication to the enhancement of the professional major are requisites for the award.

Jenna Salter King received the Dale A. Huggins Scholarship. The \$1,250 award goes annually to a student who plans to practice in eastern North

Carolina and who demonstrates financial need.

Katie Parrish received the Maydell Turner Edwards Award. The \$1,000 scholarship is awarded to a second-year student interested in geriatric physical therapy. 🗳

Faculty and Staff

Dean's Office

Stephen W. Thomas, EdD
Professor and Dean

Kevin O'Brien, PhD
Professor and Associate Dean for Academic Affairs

David Cistola, MD, PhD
Professor and Associate Dean for Research

Beth Velde, PhD
Professor and Assistant Dean for Special Projects

Vicki Johnson
Dean's Administrative Assistant

Kit Roberson
Director of Marketing

Kathryn Dail
Budget/Accounting

Jeanne Horton

Personnel/Facilities

Frankie Lynn Albritton
Contracts Clerk

Wendy B. Smith
Grants and Contracts Administrator

Robert Fainter, PhD, Director
Office of Educational Technology

Jean Merenda, MS
Electronic Learning Coordinator

Patrice M. Frede
Director of Development

Biostatistics

Paul Vos, PhD
Professor and Chair

Andrada Ivanescu, PhD
Assistant Professor

Jason Brinkley, PhD

Assistant Professor

Xiangming Fang, PhD
Assistant Professor

Suzanne Hudson, PhD
Associate Professor

Kevin O'Brien, PhD
Professor

Qiang Wu, PhD
Assistant Professor

Rhonda Bode
Administrative Support Associate

Clinical Laboratory Science

W. Richard Bamberg, PhD, MT(ASCP)SH, CLDir(NCA), CHES
Professor and Chair

David Cistola, MD, PhD

Professor

P. Karen Sullivan, PhD, SM(ASCP), MT(ASCP)
Associate Professor

Kathleen Schulman, MS, MT(ASCP)
Clinical Assistant Professor

Ann C. McConnell, MAEd, MT(ASCP), CLS(NCA)
Laboratory Manager/Adjunct Faculty

Doris Johnson
Administrative Support Associate

Communication Sciences and Disorders

Gregg Givens, PhD
Professor and Chair

Mark Allen

Technologist for Distance Learning

Rose Allen, PhD
Associate Professor

Lisbeth Heilmann, MS, CCC-SLP
Clinical Supervisor

Monica Hough, PhD, CCC-SLP
Professor

Deborah Bengala, MA, CCC-SLP
Clinical Associate Professor

Kathleen T. Cox, PhD, CCC-SLP
Associate Professor

Deborah S. Culbertson, PhD
Director, Audiology Clinic

Clinical Associate Professor

Meta M. Downes, MA, MAEd, MS
Associate Professor
Director of Undergraduate Studies

John Heilmann, PhD, CCC-SLP

Assistant Professor

Lisbeth Heilmann, MS, CCC-SLP
Clinical Supervisor

Monica Hough, PhD, CCC-SLP
Professor

Director of Graduate Studies

Sherri M. Jones, PhD
Associate Professor

Timothy A. Jones, PhD
Professor

Joseph Kalinowski, PhD
Associate Professor

Julia T. Morrow, MA, CCC-SLP

Clinical Supervisor
Coordinator of External Clinical Education

Michael Rastatter, PhD

Professor

Sharon Rutledge, AuD
Clinical Assistant Professor

Martha (Betty) Smith, PhD, CCC-SLP
Clinical Professor and Director of Clinical Operations

Andrew Stuart, PhD
Professor

Marianna Walker, PhD, CCC-SLP
Associate Professor

Sherri Winslow, MS, CCC-SLP
Clinical Supervisor

Cynthia Cox
Administrative Support Associate

Emerette Dominy
Administrative Support Associate

Wendy Harding

Administrative Support Associate

Health Services and Information Management

Elizabeth Layman, PhD, RHIA, CCS, FAHIMA
Professor and Chair

Paul Bell, PhD, RHIA, CTR
Associate Professor

Myra M. Brown, MBA, RHIA
Associate Professor

Robert Campbell, EdD
Assistant Professor

Donald Ensley, PhD
Professor

Susie T. Harris, PhD, RHIA, CCS
Assistant Professor

Faculty and Staff



By Pat Frede
I never imagined so many wonderful things could happen in only a year.
In November, our alumni, students and their parents joined in celebrating the 40th anniversary of the first class of students in the School of Allied Health Professions and Medical Education Center, under the first dean, Dr. Edwin

What a year it has been

Monroe. We were grateful that so many of you took the time to “come home.”
We also have several milestones to be thankful for: the establishment of the first distinguished professorship, the creation of college-wide funds for research and student leadership, and the College of Allied Health Sciences’ Patriot Scholarship.
Through the generosity of our donors, we have endowed scholarships in every department of the college. We sincerely appreciate all you give, whether it is a monetary gift, your time in teaching or mentoring our students, your willingness to hire our students, or the way you represent ECU in our communities through service and health care.
We are updating our alumni database so we can stay in touch. Please visit the Web site www.ecu.edu/cs-dhs/ah/alumni.cfm to add class notes, tell us what’s new with you and your family, and add or update your e-mail address



Editor’s note: Frede, senior chief petty officer and reservist with the United States Navy, has been recalled to active duty in support of Operation Enduring Freedom and will be serving in Afghanistan. During her 15-month absence, please contact Carole Novick, president of the Medical & Health Sciences Foundation, Inc., with inquiries about development or alumni relations.

Determination

pays off for little girl, alumna and ECU

A new endowed scholarship will honor an East Carolina University graduate in speech language pathology and a child she has helped learn to talk.
Frank and Renee Floyd of Raleigh have established the Tanya Johnson McDowell & Riley Floyd Endowed Scholarship in Speech-Language Pathology in honor of their 10-year-old daughter and her speech language pathologist.
This is the first of its kind at ECU. The recipient will share McDowell’s passion for children and “never give up” attitude.
McDowell, a 1987 ECU graduate with a master’s degree in speech language and auditory pathology, has a passion for helping children succeed. That passion is clearly evidenced in her work at Let’s Talk Speech and Language

Services in Raleigh, a business she and a partner started some 13 years ago.
Their work has improved the lives of numerous children and their families including the Floyds, whom McDowell met when Riley was 2. She was non-verbal and exhibited a severe form of childhood apraxia of speech, a disorder in which children are unable to execute speech articulatory movements because of motor planning and coordination problems. These children know what they want to say, but just can’t say it.
The Floyds were searching for the miracle that would enable their child to talk. McDowell gave them hope. “I believe she will talk,” she said.
McDowell flew with the family to have Riley evaluated by a nationally known expert in the field, who offered



ECU alumna Tanya Johnson McDowell, right, and Riley Floyd are being honored with a scholarship in their name, the first of its kind in communication sciences and disorders.
no encouraging words and suggested she wouldn’t be able to talk.
McDowell persevered, and through sheer determination, creativity and hard work, Riley now is able to speak in sentences and express her wants and needs. Although her speech is not perfect, Riley has come full circle from the child McDowell saw eight years ago. 🙏

Faculty and Staff

Michael H. Kennedy, PhD, MHA, FACHE
Associate Professor
Robert Kulesher, PhD
Assistant Professor
Program Director, Health Services Management
Thomas Ross, PhD
Assistant Professor
Pat Royal, EdD
Assistant Professor
Bonita Sasnett, EdD
Assistant Professor
Xiaoming Zeng, MD, PhD
Assistant Professor
Jennifer Pitt
Administrative Support Associate
Rosa Harris
Administrative Support Associate

Occupational Therapy
Leonard G. Trujillo, PhD, OTR/L
Associate Professor and Chair
Don Michael Bradley, PhD, OTR
Assistant Professor
Anne E. Dickerson, PhD, OTR/L, FAOTA
Professor
Denise Donica, DHS, OTR/L
Assistant Professor
Annette Jones, MBA, OTR/L
Admissions Coordinator
Carol Lust, EdD, OTR/L
Assistant Professor
Jane Painter, EdD, OTR/L
Associate Professor
Tim Reistetter, PhD, OTR/L
Assistant Professor

Beth Velde, PhD, OTR/L
Professor
Kathy Benitez
Administrative Support Associate
Margaret Moody
Administrative Support Associate
Physical Therapy
Denis Brunt, EdD, PT
Professor and Chair
Bruce C. Albright, PhD, PT
Professor
Leslie Allison, PhD, PT
Assistant Professor
Amy Gross McMillan, PhD, PT
Assistant Professor
Patricia S. Hodson, PT, DPT, PCS
Clinical Associate Professor and Director of Clinical Education

Walter L. Jenkins, DHS, PT, ATC-L
Associate Professor and Associate Chair
Terry Jones, PhD
Assistant Professor
Sue Leach, PhD, PT, MS, NCS
Clinical Assistant Professor
Wayne Scott, PhD, PT
Assistant Professor
Jacob Thorp, DHS, PT
Clinical Assistant Professor
D.S. Williams, PhD, PT
Associate Professor
Kevin Youngs, MPT
Clinical Instructor
Karen Eastwood
Administrative Support Associate
Leslie Hargrave
Administrative Support Associate

Physician Assistant Studies
Larry P. Dennis, MPAS, PA-C
Associate Professor and Chair
Kelly Brilliant, MPH, PA-C
Clinical Assistant Professor
Spencer Cole, MPAS, PA-C
Clinical Assistant Professor
Clinical Coordinator
Julie Daniel-Yount, MHS, PA-C
Clinical Assistant Professor
Clinical Education Coordinator
Peggy (Dody) McMillen, MPAS, PA-C
Clinical Assistant Professor
Admissions Coordinator
Carolyn Pugh, MHS, PA-C
Clinical Assistant Professor

Jane Trapp, MEd, PA-C
Clinical Associate Professor
Didactic Education Coordinator
Shawn M. Wagner, MMS, PA-C
Clinical Assistant Professor and Clinical Coordinator
Patricia Cannon
Administrative Support Associate
Angela Prewitt
Administrative Support Associate
Rehabilitation Studies
Paul P. Alston, PhD, CRC
Professor and Chair
Director of Graduate Programs
Mary Crozier, EdD, CSAC, CPP
Assistant Professor
Coordinator of the Substance Abuse Counseling Certificate Program

Martha H. Chapin, PhD, LPC, CRC, CDMS, NCC
Associate Professor
Director of Undergraduate Rehabilitation Services
Lloyd Goodwin, PhD, LPC, CRC-MAC, LCAS, CCS, ACS
Professor
Director of Substance Abuse & Clinical Counseling
Michael T. Hartley, PhD, CRC
Assistant Professor
Nathalie Mizelle, PhD, CRC, LPC
Assistant Professor
Shari Sias, PhD, LPC
Assistant Professor
Steven R. Sligar, EdD, CVE
Assistant Professor
Director of Vocational Evaluation

Mark A. Stebnicki, PhD, LPC, CRC, CCM
Professor
Director of Rehabilitation Counseling
Sharon Shallow, MAEd
Clinical Instructor
Stephen W. Thomas, EdD, CRC, CVE
Professor
Paul Toriello, RhD
Assistant Professor
Daniel Wong, PhD
Professor
Director of Doctoral Studies
Cathy Moore
Administrative Support Associate
Judy Harrison
Administrative Support Associate

Faculty and Staff

1974

Bonnie Jean Rettgers (BS speech, language and auditory pathology; MS '80 audiology, Colorado State University; AuD '04 Arizona School of Health Sciences) of Tehachapi, Calif., received the Leadership Award from the American Academy of Audiology in 2004. She is a member of The Flying Samaritans and Aeromedicos, who provide medical care to people in remote areas of Mexico.

1979

John Dwight Pero (BS physical therapy) is pursuing a doctorate of physical therapy at Virginia Commonwealth University. He works for Professional Therapies Inc. in Roanoke, Va. He and his wife Sarah ('79 ECU nursing) have two sons, Matthew and David.

1980

Sheila Jones Summer (BS speech language auditory pathology, MS '82) is intake coordinator at Raleigh Children's Developmental Services. Her husband is Wes Summer ('78 ECU) and they have three children.

1982

Lori Leeds (BS physical therapy) of San Jose, Calif., is a physical therapist, certified ergonomist and manager with North Coast Medical. She has an 18-year-old son.

Zita Marie Roberts (BS school and community health) of Shelby is a case manager in a local health department.

1983

Mary Margaret White Walsh (BS occupational therapy) of Raleigh works with Triangle Orthopedics. She and her husband, Mike, have two sons, Ryan and Will.

1984

Joy Hardee (BS medical record administration) of Ayden is privacy

officer and an administrator in the Office of Audit and Compliance for University Health Systems of Eastern Carolina in Greenville.

1989

Nancy McNeill Peterson (BS medical record administration, '95 occupational therapy) celebrated the birth of son, Chase McNeill Peterson, on Aug. 5, 2008.

Donna Baginski Sherman (BS speech language auditory pathology, MS '97) is a speech language pathologist in the Winston-Salem Forsyth County Schools. She and her husband, Mark, have three children, Laura, Katie and Will.

1991

Timothy L. Gruebel (BS physical therapy) of Winston-Salem graduated from Wake Forest University School of Medicine in 2005. He is completing anesthesiology residency and will begin a cardiothoracic anesthesiology fellowship this year at WFU. He and his wife, Laura Weinle, an ECU alumna, have three children.

1993

David A. Kibler (BS occupational therapy) of Rural Hall became a certified hand therapist in 2002 and has been a hand therapist for 13 years. He married Lisa Michelle Helton, also an occupational therapist, on Feb. 2, 2008.

Tracy Bruton Nunn (BS physical therapy) of Lexington is assistant director of rehabilitation services and site director at North Davidson Rehabilitation. She and her husband, Mike, have two children, Ryan and Olivia.

Jamey Tisdale (BS clinical laboratory science) is group product manager for Microsoft Corporation and founder of www.GeezerGamers.com. He lives with his wife and three sons in Duvall, Wash.

1995

Sarah Sutton Wilbert (BS health information management) is manager of health information at Lifecare Hospital in Plano, Texas. She and her husband have two children, Madeline and Luke.

1996

Heidi Williamson Neuberg (MS rehabilitation counseling and substance abuse) is a licensed rehabilitation counselor and has started a private practice in New Jersey.

1997

Marc David Capannola (BS physical therapy) of Raleigh is clinical director of Performance Physical Therapy in Cary. He and his wife, Melissa Coltrain Capannola (ECU '97 BS physical therapy), have two children.

1998

Skip Dougherty (MS rehabilitation studies) of Greenville is a vocational rehabilitation evaluator in New Bern. He serves on the board of directors for Gardeners for Hope, a breast cancer support group.

1999

Kathryn Sprinkle Trolenberg (BS communication disorders, M.Ed. audiology University of Virginia '01) and her husband, Karl, a 2000 ECU graduate, have two sons, Paul, and George, who was born April 28, 2008. They live in Hinton, W.Va.

2000

Glen E. Neal (MS physical therapy) and his wife, Melissa, of Lenoir welcomed their first child, Kyleigh Ellen, on Nov. 2, 2007.

Anna Stanko Whisnant (MS physical therapy) is a physical therapist with CarePartners in Asheville. She married Jason Whisnant in May 2007.

2001

Nina McClellan Atchley (MS audiology) and her husband, Allen Powell Atchley, (ECU '01 MS audiology) celebrated the birth of their son, Nathan McClellan Atchley, on Oct. 28, 2008.

Kelly McCarthy Black (MS physical therapy) is assistant director for outpatient physical therapy at St. John's Health System in Springfield, Mo.

Gene Saunders (MS rehabilitation counseling) completed a doctorate in clinical psychology in January 2008. He works for Craven Regional Medical Center in New Bern.

2002

Peggy Ann Atkinson (BS rehabilitation services) of Greenville works in the information technology department at ECU. She is pursuing a master's degree in adult education.

Helen Gardner Lytle (BS occupational therapy) of Jamesville is a home health occupational therapist. She has been married since 2004 and has one son, Mason.

Tracy Murray Mooring (MS physical therapy) of Raleigh is a physical therapist in outpatient pediatrics for WakeMed. She had a son, Caleb Arthur, on Aug. 17, 2007.

Leslie Avbel Pollard (physical therapy) of Wendell is a stay-at-home mother of 2-year-old quadruplets and a 5-year-old kindergartner.

Jennifer Walden (BS occupational therapy) is a hand therapist at Raleigh Orthopedic Clinic.

2003

Kris-Shae McCall (BS health information management) is assistant manager of the medical record department at Gaston Memorial Hospital in Concord. She is completing a master's degree in health administration.

Joanna Leigh Moore (BS clinical laboratory science) is a medical



Paola Mock, wife of communication sciences and disorders doctoral student Bruce Mock, enjoys the college's 40th anniversary. Bruce Mock was honored Nov. 8 as one of 40 outstanding students.

technologist in the hematology lab at Pitt County Memorial Hospital.

2004

Janna Lhotsky Lowman (MS physical therapy) of Sneads Ferry had a son, Charles Jackson Lowman, on Aug. 31, 2007. She works at New Hanover Regional Medical Center in Wilmington.

2005

David Roach (BS health services management) of Beaufort is director of clinical education in the respiratory therapy program at Carteret Community College in Morehead City.

2006

Michael Casey (MS rehabilitation studies) is a rehabilitation counselor for the West Virginia Division of Rehabilitation Services in Charleston.

Mark V. Cavaliere (MS physician assistant studies) of Greenville is a family medicine physician assistant for the Greenville VA outreach clinic.

Timothy Cornette (MS rehabilitation studies) married ECU alumna Rachel Virginia Harris on Nov. 3, 2007, in Norfolk, Va.

Stephanie Clark Craft (MS rehabilitation studies) is a licensed clinical addictions specialist and a certified rehabilitation counselor

with North Carolina Vocational Rehabilitation at PCMH.

Brandee Kaye Keip (MS speech language and auditory pathology) of Surfside Beach, S.C., started her own business, Speech at the Beach.

Evan K. Roberts (rehabilitation services) of Charlotte is a mental health case manager.

2007

Freya Hardy Lynch (health services management) married Del Lynch in September 2008. She is practice manager of Carolina Behavioral Health in Durham.

Meredith Christian Martin (health services and information management) of Winterville is a supervisor in the health information management services department at PCMH.

Kenneth Adam Mattox (BS clinical laboratory science) of Charleston, S.C., works at the Medical University of South Carolina in the Division of Hematology.

Kourtney Elise Thompson (BS health services and information management) works for PPD, a contract research organization in Wilmington.

2008

Abigail Elizabeth Martinez (MS speech language and auditory pathology) is an elementary school speech language pathologist in Stafford, Va. ☺



Laura Ball



Jason Brinkley



Denise Donica



Xiangming Fang



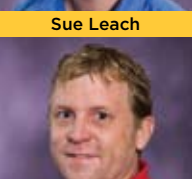
Michael T. Hartley



Andrada Ivanescu



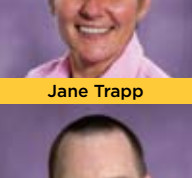
Sue Leach



Jacob Thorp



Jane Trapp



Shawn Wagner

New Faculty

Allied Health Sciences welcomes 10 new faculty

The College of Allied Health Sciences announces the following additions:

Laura J. Ball, associate professor in the Department of Communication Sciences and Disorders, received bachelor's degrees in speech pathology and audiology and foreign languages at West Virginia University, a master's degree in speech language pathology at the University of Tennessee-Knoxville and a doctorate from the University of Nebraska-Lincoln. She previously worked at the University of Nebraska Medical Center Munroe-Meyer Institute for Rehabilitation and Genetics in Omaha.

Jason Brinkley, assistant professor in the Department of Biostatistics, received his bachelor's and master's degrees in mathematics from East Carolina University, a master's degree in statistics and a doctorate from North Carolina State University. While pursuing his graduate studies, Brinkley worked on an autism research study at the Duke Center for Human Genetics, and phase IV clinical trials at GlaxoSmithKline.

Denise K. Donica, assistant professor in the Department of Occupational Therapy, received a bachelor's degree in psychology and criminal justice, and an occupational therapy degree both from Indiana University. She earned her doctorate of health science from the University of Indianapolis. Donica previously was an instructor at the University of Indianapolis and staff therapist at Ball Memorial Hospital.

Xiangming Fang, assistant professor in the Department of Biostatistics, holds a bachelor's degree in industrial foreign trade from Beijing Institute of Technology, and a master's and doctoral

degrees in statistics from the University of Iowa. His research interests are generalized additive models, spatial statistics and their applications in ecology, geography and environmental and health sciences.

Michael T. Hartley is an assistant professor in the Department of Rehabilitation Studies. He is a certified rehabilitation counselor and member of the American Counseling Association. In the past, he worked as a rehabilitation counselor to assist individuals with disabilities to live independently in the community. He also served as a director and advocate for a rural Independent Living Center.

Andrada Ivanescu, assistant professor in the Department of Biostatics, received her master's and doctoral degrees in statistics from Florida State University. As a graduate student, she worked on meta-analysis to find the optimal body weight of individuals across a collection of cohorts from different nations.

Sue Leach has joined the Department of Physical Therapy. She holds a bachelor's degree in human performance from the University of Toledo, a master's in physical therapy from Columbia University and a doctorate in motor behavior from Louisiana State University. She is a nationally board-certified clinical specialist in neurologic physical therapy. She previously worked in a rehabilitation hospital and a rehabilitation center treating patients with stroke, spinal cord injuries, amputation, brain injuries and other diagnoses.

Jacob N. Thorp, clinical assistant professor in the Department of Physical Therapy, received a bachelor's

degree in biology from Trevecca Nazarene University, a physical therapy degree from Des Moines University-Osteopathic Medical Center, and a doctor of health science from the University of Indianapolis. He has a manual therapy certification from St. Augustine University. Thorp previously was an outpatient orthopedic therapist and clinic director with Physiotherapy Associates in Nashville, Tenn., and a staff therapist at Vanderbilt Medical Center. His research interests include kinetics of the jaw joint and its relation to the cervical spine and posture.

Jane Trapp, clinical associate professor in the Department of Physician Assistant Studies, earned her bachelor's degree and physician assistant certificate from George Washington University. She completed a post-graduate physician assistant surgical residency program at Norwalk-Yale University. She received a master's degree in educational leadership from Wilkes University. Trapp previously was a faculty member and program director at Pennsylvania College of Technology in Williamsport, Pa. She has been a physician assistant in emergency medicine and urgent care in several facilities in Pennsylvania, Ohio and North Carolina.

Shawn M. Wagner has joined the Department of Physician Assistant Studies as clinical assistant professor and clinical coordinator. He received a bachelor's in medical science (physician assistant) and a master's in medical science (with emphasis in emergency medicine) from Alderson-Broaddus College in Philippi, W.Va. Wagner has been a practicing physician assistant in emergency medicine for 16 years.

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Dean: Stephen Thomas, EdD

Editor: Crystal Baity

Graphic Designer:
Laura Davenport

Photographer: Cliff Hollis

Writers:
Crystal Baity
Doug Boyd
Pat Frede
Christine Neff

Contributing Photographers:
Jay Clark
Forrest Croce
Mimosa Hines

Editorial Assistants:
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Calendar 2009

April	
19-25	National Medical Laboratory Professionals Week National Occupational Therapy Month Counseling Awareness Month
May	
8	ECU Spring Commencement
9	College of Allied Health Sciences Graduate Recognition Ceremony National Better Hearing and Speech Month
October	
5-11	National Physician Assistant Week
17	College of Allied Health Sciences Homecoming Alumni Celebration College of Allied Health Sciences Annual Family Picnic National Physical Therapy Month
November	
1-7	National Health Information and Technology Week
1-7	Allied Health Professions Week Fifth annual Rehabilitation and Allied Health Research Day



Dr. Camara Jones, a family physician, epidemiologist and research director on social determinants of health and equity for the Centers for Disease Control and Prevention, provided the keynote address for the annual Jean Mills Health Symposium held Feb. 6 at the Greenville Hilton and Greenville Convention Center. More than 170 people registered for the event featuring experts who use a health empowerment model. Research and services that empower individuals to take responsibility for improving their health, thereby reducing health disparities, was the focus of the day.



East Carolina University
College of Allied Health Sciences
Health Sciences Building
Greenville NC 27858

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We look forward to
hearing your news!